AN ANALYSIS OF THE IMPACT OF EMOTIONAL INTELLIGENCE ON SERVICE QUALITY AND CUSTOMER SATISFACTION IN THE TELECOMMUNICATION SECTOR IN GHANA

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ABSTRACT

This study examined the impact of service providers' emotional intelligence on service quality and customer satisfaction in the telecommunication sector of Ghana. A quantitative research technique was adopted to test hypotheses whose conclusions could be generalised over the telecommunication sector in Ghana. Probability sampling methods were used to select 384 each of customers and employees of all telecommunication firms in Ghana. Data were collected using a self-administered questionnaire. Data were analysed using Pearson's correlation test, partial correlation test, multiple linear regression and Analysis of Covariance (ANCOVA). Findings of this study indicated that emotional intelligence is highly positively related to service quality (r = .889, p = .000) and customer satisfaction (r = .573, p = .000). Also, emotional intelligence moderates the relationship between service quality and customer satisfaction. Service quality and emotional intelligence make an interactive effect on customer satisfaction. Emotional intelligence and service quality significantly predict customer satisfaction (p < .05) and account for 57.3% of variance. More importantly, emotional intelligence significantly predicts service quality (p < .05) and accounts for 79% of variance. It is concluded that emotional intelligence significantly predicts both service quality and customer satisfaction, though it predicts service quality more strongly.

KEYWORDS: Service Quality, Customer Satisfaction, Emotional Intelligence, Service Provider, Telecommunication Sector

INTRODUCTION

The increasing level of market competition in many sectors and the expectation of businesses to enhance growth have taken marketing to a level where existing customers, relative to potential customers, are given utmost priority by marketers (Radha & Prasad, 2013; Kotler & Armstrong, 2006). Practically speaking, managements of businesses in all sectors expect to have the strongest influence on existing customers and potential customers, both in the short and long runs. To the marketer, a business should be able to make customers and sustain the growth of its customer-base, though utmost priority must be given to satisfying and keeping existing customers. Marketing provides a collection of strategies for making new customers, satisfying them by providing superior-quality products and creating and relishing opportunities for new customers (Radha & Prasad, 2013; Kotler & Armstrong, 2010; Talebi et al. 2012). Nonetheless, the principles and methods of achieving marketing objectives in an organisation is said to be based on whether services or products are the needs the organisation wants to satisfy (Rawal, 2013; Kotler & Armstrong, 2010). This brings to light the fact that marketing has two basic facets, namely service marketing and product marketing (Kotler & Armstrong, 2006; Talebi et al. 2012).

In service marketing, an organisation uses some economic activities whose output is not a physical product or construction to satisfy needs and wants while making and maximising value from this process (Kotler & Armstrong, 2006). Since a service is consumed at the time it is produced (Yadav & Dabhade, 2013; Kotler & Armstrong, 2010), it has been argued that services marketing is much more relationship-driven (Kotler & Armstrong, 2010). In line with this argument, a customer would be much more satisfied if a service is consumed by him or her in the best possible relationship with the service provider. More often than not, a good relationship between the customer and the service provider provides the medium for the customer to make expected value of a service delivered (Radha & Prasad, 2013). In most types of services, a good relationship between the customer and service provider is the expectation of the customer (Yadav & Dabhade, 2013; Kotler & Armstrong, 2010). Therefore, customers' service quality perceptions and their loyalty are largely influenced by service providers' relationship to them. Consequently, relationship marketing is a major productivity tool to firms in the services sector (Yaghoubi et. 2011).

Relationship marketing comes with the framework of strategies for building result-oriented organisation-customer relationship (Yaghoubi et. 2011). With relationship marketing, the organisation is able to convey promises and services to customers satisfactorily. The key role of relationship marketing is to savour every customer-organisation interaction in terms of what customers want and what the organisation stands to gain (Yaghoubi et. 2011; Horri et al. 2013). Yet, many have argued that relationship marketing effectiveness rests on emotional intelligence (EI). Evidence to this is that many researchers and marketers have propounded models and conceptual frameworks that render relationship marketing effectiveness subject to the emotional intelligence of relationship personnel or service providers (Kernbach & Schutte, 2005; Horri et al. 2013).

Emotional intelligence (EI) is said to be the ability to identify, assess and control the emotions of oneself, of others and of groups (Harms & Credé, 2010). It was first defined by Mayer & Salovey (1997) as "the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (p. 18). This definition was later modified by Mayer & Salovey (2001) to "the ability to perceive emotion, integrate emotion to facilitate thought, understand emotions and to regulate emotions towards personal growth" (p. 233). Contemporary definitions and concepts of emotional intelligence are based on the above definitions and the works of Goleman (1996).

Research at varied levels has shown that emotional intelligence affects organisational financial performance and growth (Mayer et al. 2001), especially in health care (Freshman & Rubino, 2002; Martins et al. 2010) and customer service delivery in the financial services sector (Kernbach & Schutte, 2005; Radha & Prasad, 2013). It is worth noting that the influence of EI on service quality is what translates into firm's financial performance (Danquah, 2014). Moreover, EI is found to positively relate to service quality and customer satisfaction in various aspects of services marketing (Yaghoubi et. 2011; Horri et al. 2013). In banking, EI is identified as a factor that contributes to service quality, customer satisfaction and retention through service delivery (Radha & Prasad, 2013; Danquah, 2014). In addition, emotional intelligence has been empirically found to impact the financial performance of service providers in terms of return on investment (Kernbach & Schutte, 2005). At a greater extent, Danquah (2014) and Kernbach & Schutte (2005) found in their researches that EI plays a moderating role in the relationship between service quality and customer satisfaction.

As a result of the strong impact of emotional intelligence on service quality and customer satisfaction (Radha & Prasad, 2013; Martins et al. 2010), researchers have suggested that service companies use training programs to

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equip their service providers with emotional intelligence (Danquah, 2014; Martins et al. 2010). For managements of organisations to be motivated to invest into the acquisition of EI, ample evidence must exist on its impact on service quality, customer satisfaction and organisational performance. As a result of the fact that the subject is relatively new (Radha & Prasad, 2013; Danquah, 2014), not much is known by service firms about EI, especially its impact on service quality (Danquah, 2014). This situation has been ascribed to a lack of identifiable research on the subject (Radha & Prasad, 2013; Danquah, 2014). This situation is worse off from a Ghanaian viewpoint. Though Danquah (2014) carried out a related research based on the banking sector in Ghana, many more related researches are needed, especially for the telecommunication sector of Ghana, a dominant and fast-growing sector. This study was therefore carried out to contribute to the limited body of researches available on the subject from the perspective of the telecommunication sector in Ghana.

STUDY OBJECTIVE

In this study, the impact of emotional intelligence (EI) on service quality and customer satisfaction in the telecommunication sector of Ghana was examined. This paper sought to provide a basis for maximising customer and organisational value in the telecommunication sector in Ghana by using training programs to equip service providers with EI.

LITERATURE REVIEW

Impressively, literature on the impact of emotional intelligence on service quality, customer satisfaction and business performance is expanding owing to the attention being given to the subject by researchers. This section of this paper briefly reviews literature on emotional intelligence and its impact on service quality and customer satisfaction.

The performance of service providers or relationship personnel of telecommunication firms and how it impacts service quality and customer satisfaction is underpinned by Goleman's (1995) model of mixed emotional intelligence. This model argues that emotional competences are not innate talents; rather they can be learnt. Invariably, this model implies that people can be trained to acquire emotional intelligence. This argument validates the recommendation of researchers for service institutions to adopt training programs to equip relationship officers with EI.

The model of Goleman (1995) was originally modified to consist of five main EI constructs or elements by him. These five constructs are explained as follows (Goleman, 1995; Kernbach & Schutte, 2005; Radha & Prasad, 2013; Danquah, 2014):

Self-Awareness: It is the ability to know customers' and one's emotions, strengths, weaknesses, drives, values and goals and recognize their impact on others while using gut feelings to guide decisions (of the service provider).

Self-Regulation: This involves controlling or redirecting one's disruptive emotions and impulses and adapting to changing circumstances of customers. This is based on the fact that customer taste, preferences or/demands keep changing with time.

Social Skill: This involves managing relationships with customers to move them in the desired direction of patronage and retention.

Empathy: This deals with considering customers' feelings, especially when making decisions about product/service packaging and customer-focused strategy implementation.

Motivation: This is a psychological element that drives the service provider to achieve the highest level of customer patronage and satisfaction through service quality.

Through research, in which Factor Analysis was used, Boyatzis, Goleman & Rees (1998) later reduced the above five constructs to four, namely self-awareness, self-regulation, social awareness and social skill. The model of the five constructs came with 25 emotional and social competences. The four constructs model, made up of 19 emotional competences, has become the modern framework of measuring EI (Bradberry & Greaves, 2008). Currently, however, the emotional intelligence model is generally embedded in a model that views relationship marketing as a dependent variable on emotional intelligence (Yaghoubi et al. 2013). This model is conceptualised in the following figure.
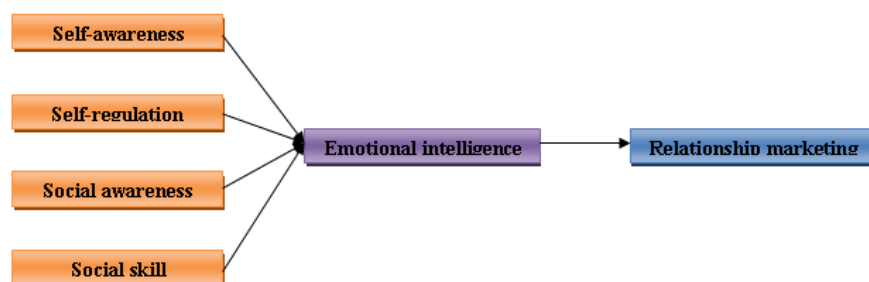
Source: Yaghoubi et al. (2011)

Figure 1: Conceptualisation of Emotional Intelligence and Relationship Marketing

Based on Figure 1, emotional intelligence is composed of its four primary constructs (Yaghoubi et al. 2011; Horri, et al. 2013), which are self-awareness, self-regulation, social awareness and social skill. Emotional intelligence is then viewed broadly as a necessary foundation for effective relationship marketing (Yaghoubi et al. 2011). In service marketing, service quality, customer satisfaction and customer retention are driven by the effectiveness of relationship marketing (Kotler & Armstrong, 2010; Yaghoubi et al. 2011; Horri, et al. 2013). Therefore, the conceptual model above can be modified into the following:
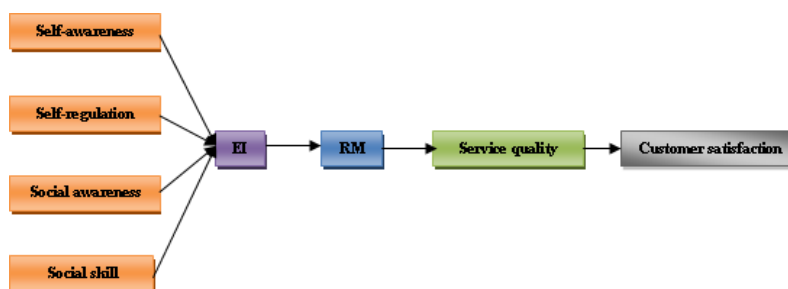

Figure 2: Conceptualisation of EI, RM, Service Quality and Customer Satisfaction

Key: EI = Emotional intelligence; RM = Relationship marketing

In Figure 2, customer satisfaction feeds on service quality, which directly depends on relationship marketing. Since relationship marketing depends on EI, service quality and customer satisfaction may be said to be influenced by emotional intelligence. This conceptualisation is supported in empirical studies.

Research indicates that emotional intelligence affects organisational financial performance and growth (Mayer et al. 2001), especially in health care (Freshman & Rubino, 2002; Martins et al. 2010) and customer service delivery in the financial services sector (Kernbach & Schutte, 2005; Radha & Prasad, 2013). Moreover, the influence of EI

on service quality is what translates into firm's financial performance in terms of return on investment (Danquah, 2014). EI is also found to positively relate to service quality and customer satisfaction, regardless of the subsector of service marketing involved (Yaghoubi et. 2011; Horri et al. 2013). In banking, EI is identified to influence service quality, customer satisfaction and retention (Radha & Prasad, 2013; Danquah, 2014).

Emotional intelligence has been empirically found to also impact the financial performance of service providers in terms of return on investment (Kernbach & Schutte, 2005; Danquah, 2014). At a greater extent, Danquah (2014) and Kernbach & Schutte (2005) found in their researches that EI plays a moderating role in the relationship between service quality and customer satisfaction. There is therefore ample empirical evidence that emotional intelligence influences and impacts service quality and customer satisfaction.

HYPOTHESES

Based on the conceptual models and empirical literature reviewed in this paper, the following null hypotheses were tested:

H_{01}: There is no significant relationship between service quality and customer satisfaction in the telecommunication sector of Ghana.

H_{02}: There is no significant relationship between emotional intelligence of service providers and service quality.

H_{03}: There is no significant relationship between emotional intelligence of service providers and customer satisfaction.

H_{04}: There is no moderating effect of emotional intelligence on the relationship between service quality and customer satisfaction.

H_{05}: Emotional intelligence and service quality do not significantly predict customer satisfaction.

METHODOLOGY

In this study, the quantitative research technique was adopted owing to the need to test the hypotheses stated from objectivist philosophical standpoint. The quantitative research technique also made room for determining the reliability of items in the scales used in collecting data. It was coupled with randomisation techniques of selecting respondents to ensure that findings and conclusions of this study could be generalised in a Ghanaian context.

The population of this study was employees (service providers) and customers of the six major telecommunication firms in Ghana. These firms include MTN, Tigo, Airtel, Vodafone, Glo and Expresso. No sampling frame was used for customers in this study since not much was known about them prior to data collection. However, the sampling frame of employees comprised of those who had worked in customer care service centres in Accra for at least 2 years. Customers and employees in Accra were used as sources of information because there was insufficient financial resource for incorporating those outside Accra. As a result of the need to ensure that service providers provided accurate information in this study, members of the sampling frame were to be affiliated to the participating telecommunication firms for at least 2 years.

The number of customers for the six telecommunication firms was above 100,000. Considering the credibility and appropriateness of the sampling principle of Krejcie & Morgan (1970), an accidental selection process was used to select

and administer questionnaires to 384 customers. With the aid of the sampling frame, the selection of service providers was done using simple random and stratified sampling techniques. By applying the same sampling principle, a sample size of approximately 291 service providers was applicable, since the number of members of the sampling frame was 1,231. But due to the need to ensure that equal numbers of service providers and customers were used to ensure that unbiased comparisons were made in this study, this sample size was adjusted upward to 384, and this upward adjustment is acceptable according to Krejcie & Morgan (1970). Table 1 shows the number of customers and service providers used for each telecommunication firm.

Table 1: Telecommunication Firm by Sample Size

Telecom Firm	Customers Sample	Service Providers Sample	Total
MTN	103	93	196
Vodafone	78	81	159
Airtel	58	57	115
Tigo	67	70	137
Glo	46	48	94
Expresso	32	35	67
Total	**384**	**384**	**768**

A self-administered question for employees and customers was used. Constructs of emotional intelligence were measured with employees' questionnaire, which served as a medium of measuring employees' EI potential, at the continuous level, in service delivery. The Emotional Intelligence Appraisal (EIA) and Emotional and Social Competency Inventory (ESCI) scales of EI were used in this measurement. Customer satisfaction and service quality were measured with customers' questionnaire, which was based on the Zeithml et al. (1990) Service Delivery scale. Tables 2 and 3 come with tests that prove the reliability of the instrument used in this study.

Table 2: Case Processing Summary

		N	%
Cases	Valid	374	100.0
	Excluded[a]	0	.0
	Total	**374**	**100.0**

a. Listwise deletion based on all variables in the procedure.

Table 2 is the first table of a reliability test. It indicates that no item was removed from the instrument. In other words, all items of the instrument used in collecting data contributed to reliable data. Table 3 is an associated test that justifies this assertion.

Table 3: Reliability Statistics

Cronbach's Alpha	N of Items
.895	3

Table 2 shows the reliability coefficient; thus the Cronbach's apha value, associated with Table 3. From the table, the reliable coefficient of .895 indicates that the instrument used in data collection was highly reliable. Nonetheless, it must be noted that items in the instrument were consolidated into three major items that represent emotional intelligence (EI), service quality and customer satisfaction.

In data collection, customers at the various customer service centers were asked to respond to questionnaires after they had just been attended to by the participating relationship officers, after which service providers were issued with questionnaires for completion. This strategy was to ensure that customers provided information based on their current experiences with service delivery. Employees were made to provide responses after customers had done so to avoid employees' self-favored responses caused by their prior knowledge of the data collection exercise.

Data analysis was done using SPSS. Data analysis was backed with the normality assumption. As result, the Shapiro-Wilk test is used to verify the normality of data. Cronbach's alpha was used to identify reliability of the instruments used in data collection. All hypotheses were tested using parametric statistical tools owing to the fact that data used were continuous. Moreover, their distributions were assumed to take the characteristic nature of a normal distribution. The first, second and third hypotheses were tested using Pearson's correlation test. The fourth hypothesis is tested using partial correlation test and Analysis of Covariance (ANCOVA). The fifth research hypothesis is tested using stepwise regression analysis.

RESULTS

In this section, findings on each research hypothesis are presented. These findings are presented in view of the assumption that data used in this study are normally or approximately normally distributed. This assumption must be satisfied if the conclusions of this study are to be valid. Table 4 therefore comes with an associated normality test.

Table 4: Tests of Normality

	Shapiro-Wilk		
	Statistic	**df**	**Sig.**
Service quality	.884	374	.432
Customer satisfaction	.881	374	.120
Emotional intelligence	.879	374	.079

Table 4 shows the Shapiro-Wilk's test of normality. By principle, the null hypothesis states that data on each variable in the table are normally or approximately normally distributed. At 5% significance level, data associated with the variables are normally distributed (p > .05). Thus, data derived on service qualification (p = .432), customer satisfaction (p = .120) and emotional intelligence (p = .079) are normally distributed (p = .000). As a result, there is a basis for making valid conclusions in this study.

Table 5: Correlation between Service Quality and Customer Satisfaction

		Service Quality	**Customer Satisfaction**
Service quality	Pearson Correlation	1	.745**
	Sig. (2-tailed)		.000
	N	374	374
Customer satisfaction	Pearson Correlation	.745**	1
	Sig. (2-tailed)	.000	
	N	374	374

**. Correlation is significant at the 0.05 level (2-tailed).

Table 5 shows the correlation between service quality and customer satisfaction. It is associated with testing the first null hypothesis of this study. This hypothesis states that there is no significant relationship between service quality and customer satisfaction in the telecommunication sector in Ghana. This hypothesis is tested at 5% significance level. From Table 5, this test is significant, r (374) = .745, p = .000. Thus there is a positively high correlation between customer satisfaction and service quality. This implies that as service quality improves in the telecommunication sector in Ghana, customer satisfaction is enhanced increasingly. The first null hypothesis is therefore rejected. Therefore, service quality is highly positively related to customer satisfaction.

Table 6: Correlation between Service Quality and EI

		Service Quality	Emotional Intelligence
Service quality	Pearson Correlation	1	.889[**]
	Sig. (2-tailed)		.000
	N	374	374
Emotional intelligence	Pearson Correlation	.889[**]	1
	Sig. (2-tailed)	.000	
	N	374	374

**. Correlation is significant at the 0.05 level (2-tailed).

Table 6 shows the relationship between service quality and emotional intelligence. This table contains results on the second research hypothesis. This hypothesis states that there is no significant relationship between emotional intelligence of service providers and service quality. This test is done at 5% significance level. From the table, this test is significant, r (374) = .889, p = .000. Invariably, there is a strong positive relationship between service quality and emotional intelligence. This means that as service providers demonstrate a higher level of emotional intelligence in service delivery, the higher the quality of services provided. Therefore, the second hypothesis is also worth rejecting.

Table 7: Correlation between EI and Customer Satisfaction

		Emotional Intelligence	Customer Satisfaction
Emotional intelligence	Pearson Correlation	1	.573[**]
	Sig. (2-tailed)		.000
	N	374	374
Customer satisfaction	Pearson Correlation	.573[**]	1
	Sig. (2-tailed)	.000	
	N	374	374

**. Correlation is significant at the 0.05 level (2-tailed).

Table 7 shows the relationship between emotional intelligence and customer satisfaction. The associated null hypothesis is that there is no significant relationship between emotional intelligence of service providers and customer satisfaction. This hypothesis is also tested at 5% significance level. From the table, emotional intelligence and customer satisfaction are highly positively related, r (374) = .573, = .000. Thus, increasing emotional intelligence in service delivery improves customer satisfaction in the telecommunication sector. In this vein, the third null hypothesis is rejected. From Tables 6 and 7, EI and service quality have a stronger relationship relative to EI and customer satisfaction.

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Practically, this could be as a result of the fact that EI sheds much of its influence on service quality, which in turn influences customer satisfaction (See Table 5).

Table 8: Partial Correlation – Controlling for EI

Control Variables			Service Quality	Customer Satisfaction
Emotional intelligence	Service quality	Correlation	1.000	.628
		Significance (2-tailed)	.	.000
		df	0	371
	Customer satisfaction	Correlation	.628	1.000
		Significance (2-tailed)	.000	.
		df	371	0

Table 8 is a partial correlation test. It is associated with the test of the fourth research hypothesis, which states that there is no moderating effect of emotional intelligence on the relationship between service quality and customer satisfaction. From the table, service quality and customer satisfaction are highly positively related when emotional intelligence is controlled for, r (371) = .628, p = .000. However, emotional intelligence has a reducing influence on the relationship between service quality and customer satisfaction. This is because the strength of the relationship between service quality and customer satisfaction is reduced from a coefficient of .745 to .628. This buttresses the evidence that emotional intelligence among service providers enhances service quality in the telecommunication industry. Table 12 comes with a test of between-subject effects whose findings support findings in Table 8.

Tables 9 to 11 come with findings on the fifth research hypothesis. This hypothesis states that emotional intelligence and service quality do not significantly predict customer satisfaction. This hypothesis is tested at 5% significance level using stepwise multiple linear regression.

Table 9: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.745[a]	.555	.554	.83623
2	.770[b]	.593	.591	.80085

a. Predictors: (Constant), Service quality
b. Predictors: (Constant), Service quality, Emotional intelligence

Table 9 is the model summary of the prediction of customer satisfaction by emotional intelligence and service quality. In the first model, service quality accounts for about 55.5% of variance on customer satisfaction. In the second model, service quality and EI account for about 59.3% of variance on customer satisfaction. Each of the models in the table is strong. Yet, service quality appears to account for a higher level of variance on customer satisfaction relative to EI. This could be as a result of the fact that EI empowers service quality to influence customer satisfaction, or EI sheds much of its influence on service quality, which in turn influences customer satisfaction (See Table 5).

Table 10: ANOVA

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	324.073	1	324.073	463.440	.000[a]
	Residual	260.131	372	.699		
	Total	**584.203**	**373**			
2	Regression	346.259	2	173.130	269.942	.000[b]
	Residual	237.944	371	.641		
	Total	**584.203**	**373**			

a. Predictors: (Constant), Service quality

b. Predictors: (Constant), Service quality, Emotional intelligence

c. Dependent Variable: Customer satisfaction

Table 10 shows the F tests associated with models in Table 9. For each model in the table, the linear prediction of customer satisfaction is significant at 5% significance level (p = .000). Thus the test is significant when service quality serves as the sole predictor of customer satisfaction, $F_{(1, 372)} = 463.44$, p = .000; and when EI and service quality collectively serve as predictors, $F_{(2, 371)} = 269.942$, p = .000.

Table 11: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.298	.104		12.524	.000		
	Service quality	.658	.031	.745	21.528	.000	1.000	1.000
2	(Constant)	1.555	.108		14.339	.000		
	Service quality	.993	.064	1.123	15.528	.000	.210	4.762
	Emotional intelligence	-.386	.066	-.425	-5.882	.000	.210	4.762

a. Dependent Variable: Customer satisfaction

Table 11 shows the coefficients associated with Tables 9 and 10. The t-tests are significant for each model at 5% significance level. Invariably, service quality significantly predicts customer satisfaction as a sole predictor (p = .000). When service quality and EI serve as co-predictors, each significantly predict customer satisfaction at 5% significance level (p <.05). Evidently, customer satisfaction is significantly predicted by service quality and emotional intelligence. Meanwhile, Table 12 confirms the combined influence of EI and service quality on customer satisfaction.

Table 12: Tests of Between-Subjects Effects

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	419.280[a]	5	83.856	187.111	.000
Intercept	332.866	1	332.866	742.738	.000
Squal * EI	419.280	5	83.856	187.111	.000
Error	164.923	368	.448		
Total	**4722.000**	**374**			
Corrected Total	**584.203**	**373**			

a. R Squared = .718 (Adjusted R Squared = .714)

Table 12 shows results of tests of Between-Subjects Effects. From the table, emotional intelligence and service quality interact on customer satisfaction. Invariably, service quality and emotional intelligence make an interactive influence on customer satisfaction. From Table 11 and 12, customer satisfaction is partly influenced and predicted by emotional intelligence. Moreover, the relationship between service quality and customer satisfaction is moderated by emotional intelligence. Tables 13, 14 and 15 in Appendix A show that EI predicts service quality strongly, with a variance of 79%. Therefore, EI influences customer satisfaction directly and indirectly through its high positive influence on service quality.

DISCUSSIONS

This study's findings indicate that there is a positively high correlation between customer satisfaction and service quality. Invariably, as service quality improves in the telecommunication sector of Ghana, customer satisfaction is enhanced increasingly. This relationship forms the basis of detailed analysis on the impact of EI on service quality and customer satisfaction. A strong positive relationship between service quality and emotional intelligence was found. This means that as service providers demonstrate a higher level of emotional intelligence in service delivery, the higher the quality of services provided. To Freshman & Rubino (2002), Martins et al. (2010), Kernbach & Schutte (2005), this relationship suggests that good customer-organisation relationships are improved by the emotional intelligence demonstrated by relationship personnel in service delivery. This phenomenon is not industry-specific; rather it cuts across all subsectors of the service sector (Yaghoubi et. 2011; Horri et al. 2013), where emotional intelligence boosts the effectiveness of service delivery (Martins et al. 2010).

It was also established in this study that emotional intelligence and customer satisfaction are highly positively related; thus increasing emotional intelligence in service delivery improves customer satisfaction in the telecommunication sector in Ghana. In other words, service providers' ability to identify, assess and control the emotions of oneself, of customers and of all business stakeholders positively influences customers' satisfaction. However, the strength of the relationship between EI and customer satisfaction is weaker relative to that between service quality and EI, a situation explained to be influenced by the fact that EI sheds much of its influence directly on service quality (Yaghoubi et. 2011; Horri et al. 2013), thereby having little direct influence to pose on customer satisfaction. Moreover, service quality perceptions of customers are directly driven by the extent to which service providers demonstrate emotional intelligence; and customer satisfaction is basically an outcome of service quality. These arguments are supported by the empirical evidences of Radha & Prasad (2013), Danquah (2014) and Horri et al. (2013).

Though service quality and customer satisfaction are highly positively related when emotional intelligence is controlled for, EI has a reducing influence on the strength of this relationship. This buttresses the argument that EI makes relatively lower influence on customer satisfaction due to its high influence on service quality. The high positive relationship between EI and service quality is a basis of the finding that EI significantly predicts service quality with a variance of 79%. Emotional intelligence and service quality significantly predict customer satisfaction with a variance of 59.3%, where service quality alone accounts for about 55.5% of variance on customer satisfaction. These findings corroborate findings in the researches of Danquah (2014) and Kernbach & Schutte (2005). In essence, emotional intelligence directly influences and impacts service quality and directly and indirectly impact customer satisfaction. In the context of Ghana, this study's findings are supported by Danquah (2014), whose study was based on the banking sector.

Having used a different but equally dominant sector, it can be said that there is increasing evidence that EI impacts service quality and customer satisfaction in the services sector of Ghana.

CONCLUSIONS AND RECOMMENDATIONS

Considering findings of this study, it could be concluded that there is a positively high correlation between customer satisfaction and service quality. In other words, as service quality improves in the telecommunication sector of Ghana, customer satisfaction is enhanced increasingly. Also, there is a strong positive relationship between service quality and emotional intelligence. This means that as service providers demonstrate a higher level of emotional intelligence in service delivery, the higher the quality of services provided. Emotional intelligence and customer satisfaction are highly positively related; thus increasing emotional intelligence in service delivery improves customer satisfaction in the telecommunication sector. However, the strength of the relationship between EI and customer satisfaction is weaker relative to that between service quality and EI.

Though service quality and customer satisfaction are highly positively related when emotional intelligence is controlled for, EI has a reducing influence on the strength of this relationship. Emotional intelligence significantly predicts service quality with a variance of 79%. Emotional intelligence and service quality significantly predict customer satisfaction with a variance of 59.3%, where service quality alone accounts for about 55.5% of variance on customer satisfaction. It is evident that service quality and emotional intelligence interact to affect customer satisfaction. Briefly, emotional intelligence significantly influence and impact service quality and customer satisfaction.

It is recommended that telecommunication firms and other service providers in Ghana regularly control and monitor the impact of emotional intelligence on service delivery. Managements are encouraged to equip their relationship personnel with emotional intelligence using robust EI training tools and methods. Future studies could identify the impacts made by each construct of EI on service quality and customer satisfaction in the telecommunication sector of Ghana. Future studies may also endeavour to investigate the effect of EI on business performance in terms of return on investment in the telecommunication sector of Ghana. Using samples that reflect customer care centres of telecommunication firms outside Accra may also be considered in future researches.

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APPENDICES

Appendix A

Table 13: Model Summary – EI as Predictor

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.889[a]	.790	.789	.64961

a. Predictors: (Constant), Emotional intelligence

Table 14: ANOVA – EI as Predictor

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	590.613	1	590.613	1.400E3	.000[a]
	Residual	156.981	372	.422		
	Total	**747.594**	**373**			

a. **Predictors:** (Constant), Emotional intelligence
b. **Dependent Variable**: Service quality

Table 15: Coefficients – EI as Predictor

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.039	.088		.446	.656
	Emotional intelligence	.913	.024	.889	37.411	.000

a. Dependent Variable: Service quality